

Music-production software

Making music on your PC has never been easier or more affordable. Ben Pitt puts nine budget packages through their paces to sort the chart-toppers from the flops

Making music is one of the finest pleasures in life, but all those boring scales and exercises put many of us off years ago. If you wish you'd kept up your playing, or you think you can do a better job than the latest rabble of *The X Factor* contestants, the software in this month's round-up could help you fulfil your dream.

Home-oriented music-production software is generally more approachable than it was in our last round-up 18 months ago (*Labs, Shopper* 223). Four of the packages on test welcome newcomers, guiding them past the common pitfalls and presenting features in a transparent way. Sound quality has dramatically improved, too, particularly in regard to the effects and virtual instruments that come bundled with each program (for explanations of these and other terms, see the jargon buster below).

SOMETHING FOR EVERYONE

The various competing applications are increasingly similar. Software that once specialised in dance music production now also caters for live band recording, and the reverse is equally true. This might make your choice of software a little harder, but we welcome the fact that picking an application doesn't tie you into a particular genre of music or working method.

All the programs in this review are able to take samples from a variety of sources and time-stretch and pitch-shift them so they all play in time and tune with each other. They all come with a sample library to get you started, with some libraries containing thousands of samples. All but one are able to record the input of your sound card, allowing you to record a vocal or guitar over a sample-based backing track, or even to record an entire song from scratch. However, not all are able to record multiple inputs simultaneously, which is essential for recording groups of musicians together or doing justice to a drum kit. Bear in mind that you'll need a sound card with the corresponding number of inputs, plus microphones and cables. Read 'Melody

Makers', *Shopper* 238, for more information on which hardware is required.

Another feature shared by all but one of the packages on test is MIDI recording. This is used to trigger virtual instruments running inside the software, and is often a more creative and rewarding way to build up tracks than just layering ready-made sample loops. You'll need a MIDI keyboard to take full advantage of these features, plus a sound card with special ASIO drivers to avoid a delay between playing a note and hearing the result. Again, our 'Melody Makers' feature in issue 238 can help you with hardware decisions.

All this power and flexibility can come at the expense of ease of use. There's a lot to learn in the quest for top-quality recordings, and software that baffles new users will put them off long before they've had a chance to master the craft. This is why we value ease of use above everything else, particularly as these low-cost packages are aimed at home users with limited experience of music production. Fortunately, powerful features, high sound quality and friendly controls aren't mutually exclusive, and our winning application has all three in abundance.



▲ The bundled effects and virtual instruments make a profound difference to the quality of finished mixes

THIS MONTH

Ableton Live 6 LE

Page 123

Acoustica Mixcraft 3

Page 123

Cakewalk Sonar Home Studio 6 XL

Page 123

EJay Virtual Music Studio

Page 124

Mackie Tracktion 3 Project Bundle

Page 124

Magix Music Maker 14 Producer Edition

Page 124

Magix Samplitude Music Studio 14

Page 125

Sony Acid Music Studio 7

Page 125

Steinberg Sequel

Page 125

Jargon buster Music terms explained

Automation	When static mixer settings don't do justice to a recording, automation allows you to vary mixer settings as the music progresses.	Insert effects	Effects that are applied to a single channel.
Auxiliary effects	Effects that are shared by various different channels on an auxiliary bus.	Mastering	Effects that are applied to the completed stereo mix to achieve the best possible sound quality.
Bus	Part of a mixer where different channels are mixed together. All mixers have a master output bus, but more sophisticated ones include multiple buses for adding effects to groups of channels.	MIDI	Musical Instrument Digital Interface; a computer language that allows MIDI keyboards and recording software to instruct virtual instruments what notes to play.
Channel	Part of a mixer that handles a single audio stream.	Plug-in	A utility that runs inside another application. Music software often supports effect and virtual instrument plug-ins in VST and DirectX formats.
Crossfading	Fading out one audio object while fading in another. Crossfading is a useful trick when chopping up and rearranging recordings.	Snap-to-grid	When working to a predefined tempo, snap-to-grid options let you move sections of audio around while keeping their place in the bar, beat or smaller subdivision.
Effect	A processor that changes the tone of a sound. Examples include EQ for cutting and boosting different frequencies, and compression, for reducing the range of volumes in a recording.	Virtual instrument	The software equivalent of a hardware synthesizer, virtual instruments respond to MIDI commands and produce anything from analogue-style sounds to orchestral emulations.



▲ Live 6 LE is sophisticated, but there are some strict limitations to bring it in under £100

ABLETON Live 6 LE

★★★★★

£95 inc VAT
From www.dv247.com

This brand new LE edition of Ableton Live is aimed at people who can't afford the £300 full version, which was reviewed in *What's New, Shopper* 228. On the surface, the two are hard to separate, sharing the same interface that's packed with innovative features for composition, production and performance. Its ability to warp samples into new rhythms makes it particularly powerful for experimental forms of music production, but its streamlined, precise interface will be welcomed by musicians working in all musical genres.

Inevitably, certain features have been stripped from Ableton's flagship product. Few will miss the video support and multiple input capability, and 64 audio tracks is plenty. However, projects can use a maximum of eight of the built-in virtual instruments and two VST instruments, which could be a nuisance. Meanwhile, a maximum of 12 built-in and two VST effects per project is likely to frustrate on a regular basis. The full version's highest quality time-stretching algorithm is missing, which means that samples in Live LE often won't sound as good as they do in Live. Its aptitude for live performance is slightly compromised, too, with room for just eight loops per channel in its performance-friendly Session view.

However, compared to the other software here, Live LE is impressive. Its bundled virtual instruments include up-to-date drum sounds, excellent acoustic instrument emulations and inspiring synth sounds, although editing of the latter two is limited. It's Live LE's interface that makes it stand out. It's not quite as beginner-friendly as Mackie Tracktion, but in experienced hands it's just as efficient and rewarding. Tracktion 3 Project Bundle's unrestricted features makes it the better choice overall, but for more experimental musicians or those who want to perform with a laptop, Ableton Live 6 LE is an excellent choice.

SUMMARY

- ✓ Inspiring recording and performance tools
- ✓ Innovative
- ✗ Stifling limitations in this cut-price version

MUSIC-PRODUCTION SOFTWARE Requires Windows 2000/XP/Vista or Mac OS X 10.2.8, 1.5GHz processor, 512MB RAM (1GB recommended), 2.8GB disk space
DETAILS www.ableton.com



▲ Mixcraft's straightforward interface is ideal for newcomers to music production

ACOUSTICA Mixcraft 3

★★★★★

£30 inc VAT
From www.etcetera.co.uk

Mixcraft 3 is perhaps the least well known of the packages on test, and it's definitely the simplest. There's no MIDI or virtual instrument support, and the mix architecture is pretty basic, with no buses or auxiliary channels. However, there's support for multiple simultaneous inputs and recording resolutions up to 192kHz and 32-bit. VST and DirectX plug-in support supplements the basic set of built-in effects. High-quality loops can be downloaded as required using the browser built into the software.

The streamlined features and the smart, friendly interface mean it won't take inexperienced users long to get up and running. We particularly appreciate the dialog boxes that appear to help with trickier settings, such as one that advises about latency settings when trying to monitor incoming audio with inappropriate settings. The arrange window is quick to navigate and the snap-to-grid resolution is clearly accessible at the top of the screen. Volume and pan automation is straightforward. The only feature we had a little trouble with was setting the tempo. It turned out that the main tempo display is a red herring, as the tempo is set with markers located along the top of the timeline.

Mixcraft 3 omits many of the more advanced features of the other packages on test, and the lack of MIDI support will rule it out for many people. However, its combination of features is just right for straightforward recording projects, and we appreciate how those that are included are well executed and not surrounded by unnecessary clutter. The minimum requirements are reassuringly low, as is the price. Mixcraft 3 bears a close resemblance to Sony Acid Music Studio 7 in terms of features, ease of use and price. If you don't need Acid's MIDI support then Mixcraft 3's high-resolution recording makes it a better choice.

SUMMARY

- ✓ Good value
- ✓ Straightforward audio recording
- ✗ No MIDI or virtual instrument support

MUSIC-PRODUCTION SOFTWARE Requires Windows 95/98/Me/2000/XP/Vista, 1GHz processor, 256MB RAM (2GHz dual core, 1GB recommended)
DETAILS www.acoustica.com



▲ Sonar Home Studio's powerful audio and MIDI editing features aren't for the faint-hearted

CAKEWALK Sonar Home Studio 6 XL

★★★★★

£95 inc VAT
From www.etcetera.co.uk

Sonar Home Studio 6 XL is a cut-down version of our favourite music-production software, Sonar Producer Edition, reviewed in *What's New, Shopper* 229. Ambitious but hard-up readers can rejoice, because much of what makes Producer Edition so appealing is included here. Audio and MIDI editing is comprehensive, with extensive snap-to-grid options, automatic crossfading of overlapping audio clips plus piano roll, event list and notation MIDI editors. There's support for multiple inputs for recording large ensembles or drum kits, and no limit to the number of internal, VST or DirectX effects that can be used. The only numerical limitations are 64 tracks for audio or virtual instruments and 16 buses for submixes or auxiliary effects, but most people are unlikely to hit these boundaries.

The plug-in bundle is more basic than Producer Edition's collection, but it compares well to the others here. The EQ effect sounds great and has an accessible graphical interface, although the compressor effect would benefit from friendlier controls. The mastering limiter effect included is a rarity among these packages and is vital for getting mixes loud enough to compete with commercial CDs. The virtual instrument collection is even better, with six plug-ins covering acoustic drums, analogue synthesis, sampling and orchestral sounds, and an excellent general-purpose synth filling in the gaps. The quality of these instruments compares well with professional plug-ins and hardware synthesizers.

Unfortunately, a steep learning curve is required. The main Track View window has hundreds of cryptically labelled buttons, and the first few weeks of use can be arduous. Its power makes it worth investing time in, but Sonar Home Studio 6 XL is for ambitious, technically minded users only.

SUMMARY

- ✓ Packed with professional features
- ✓ Superb virtual instruments
- ✗ Likely to be overwhelming for casual users

MUSIC-PRODUCTION SOFTWARE Requires Windows XP/Vista, 1.3GHz processor, 256MB RAM (2.8GHz, 1GB recommended), 2GB disk space
DETAILS www.cakewalk.com



▲ Snazzy graphics aside, using Virtual Music Studio is an underwhelming experience

EJAY Virtual Music Studio

★★★

£25 inc VAT

From www.amazon.co.uk

With its swishy animations and the sound effects that accompany button presses, Virtual Music Studio feels more like a game than a creative tool. Still, there's nothing wrong with that, so long as the product fulfils the brief. Various parts of the interface are unorthodox, such as the fact that effects are applied per sample or MIDI object rather than per mixer channel. However, these are likely to be seen as problems only by those who are used to more conventional software.

The highlight of this program is the inclusion of 15,000 samples covering seven electronic musical styles, from ambient to R&B. We like how these samples aren't overly complex, which makes for better musical building blocks. However, there is a lot of repetition and the extensive vocal samples are uniformly dreadful. There's a quintet of virtual instruments, too, but eJay's claim that they are comparable with those costing hundreds of pounds is true only in so much as they compare very badly. The drum machine consists of a 16-step sequencer and a choice of passable sound presets, but the pair of synths sound bland, while the virtual DJ decks take some great raw samples and render them unusable with unconvincing scratching effects.

Audio recording is available only in isolation rather than while listening to the rest of the project, so it's useful only for capturing sound effects and not for adding a live performance in time with the rest of the track. There's no support for MIDI keyboards, either, so all note input for the virtual instruments has to be done with a mouse in one-bar blocks. VST and DirectX plug-ins are not supported, and the quality of the built-in effects is quite basic.

Virtual Music Studio can provide some light entertainment at a low price. However, Sony Acid Music Studio 7 doesn't cost that much more, and it is a far more powerful and entertaining music-production program.

SUMMARY

- ✓ Massive sample collection
- ✗ Limited features
- ✗ Basic sound quality

MUSIC-PRODUCTION SOFTWARE Requires Windows 2000/XP/Vista, 1GHz processor, 512MB RAM (1.8GHz, 1GB recommended), 3.5GB disk space, DirectX 9.0c graphics
DETAILS www.ejay.com



▲ Unparalleled audio quality and sublime ease of use is a winning combination for Tracktion 3

MACKIE Tracktion 3 Project Bundle

★★★★★

£79 inc VAT

From www.dv247.com


Mackie Tracktion 3 stands apart from the other software here in that it's neither a home-oriented application nor a cut-down version of a professional application. In most respects, it's fully fledged professional software, with 24-bit, 192kHz recording, unlimited tracks, buses, instruments, effects, inputs and outputs plus comprehensive signal routing and mix automation features. Its one weak area is the meagre collection of virtual instruments. Tracktion 3 Ultimate Bundle, which costs £160, remedies this.

Despite its professional capabilities, Tracktion is remarkably straightforward. Almost everything happens within a single screen. Input icons are dragged to the required track on the left, audio and MIDI is recorded and edited in the middle, and mixer components are added on the right as and when they're needed. The lower area of the screen shows settings for whichever object is selected. Although some of these options are cryptic, simpler tasks are easy to achieve while more complex ones are usually easy to find when you need them. MIDI editing seems simplistic at first, but Mackie has packed all the features we'd hope for into a streamlined editor.

The jewel in Tracktion's crown is its effects suite, which offers the greatest flexibility and best sound quality here. Highlights include the Channel Strip, which combines a sophisticated compressor, gate and EQ, and Final Mix, a high-quality mastering plug-in. Pitch-shifting and time-stretching quality is topnotch, which means that samples with different original tempos and keys sound better when pulled into the same tempo and key. Along with sophisticated automation of every mix parameter, Tracktion 3 is fully capable of producing professional-quality recordings.

SUMMARY

- ✓ Professional features
- ✓ Easy to use
- ✗ Basic virtual instruments

MUSIC-PRODUCTION SOFTWARE Requires Windows XP or Mac OS X 10.4.8, 1GHz processor, 512MB RAM, 5GB disk space, DVD drive
DETAILS www.mackie.com



▲ Behind Music Maker's clean-looking interface is a deluge of confusing controls

MAGIX Music Maker 14 Producer Edition

★★★

£80 inc VAT

From www.magix.com/uk

When we last looked at Magix Music Maker, in *Labs, Shopper* 223, it was at version 11. With three new versions in 18 months, its developers have been busy. Sadly, the deluge of features means that what was once a beginner-friendly program is messy and confusing.

The new Vita virtual instrument draws on a 2.2GB sample library to produce a variety of high-quality MIDI synthesizer sounds. Highlights include some rich orchestral sounds, and the acoustic piano is particularly impressive. Analogue-style synth sounds are provided by Revolva 2, another new addition. It's a little too clinical for our tastes, but it's versatile and its control panel is bristling with knobs and faders to poke at with the mouse. Four drum machines carry over from previous versions, and although they're not as inspiring as the new additions they're good enough for serious use.

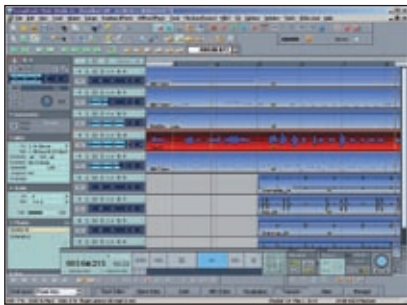
Unfortunately, you have to wade through a lot of flawed features to take advantage of these sounds. We had problems achieving low enough latency for live MIDI performances using the same audio interface that worked fine with other software. The effects options are overly complex. The ability to achieve the same results in up to three different ways confuses more than it liberates. Some features, such as installing VST plug-ins or recording in mono rather than stereo, are located so obscurely that we doubt most people would ever find them. Others, such as reordering a chain of effects, are impossible. Bizarrely, samples can be retuned, but only according to a pre-defined – and often inappropriate – key. On one occasion, the software deleted a chunk of music without warning.

We found countless other bugs and odd behaviour that made using Music Maker 14 a frustrating experience.

SUMMARY

- ✓ Excellent bundled MIDI sounds
- ✗ Hard to find many features
- ✗ Lots of frustrating faults

MUSIC-PRODUCTION SOFTWARE Requires Windows 2000/XP/Vista, 700MHz processor, 256MB RAM (512MB recommended), 3GB disk space
DETAILS www.magix.com/uk



▲ The needlessly complex interface makes using Samplitude Music Studio a gruelling experience

MAGIX Samplitude Music Studio 14



£55 inc VAT
From www.amazon.co.uk

Samplitude Music Studio 14 makes a poor first impression. After installation, it greeted us with instructions translated from German into something that only vaguely resembled English, followed by a sentence still in German. Two overly complex dialog boxes later, we reached the main interface, which is intimidating with no fewer than 17 menu options.

There are some strong parts of the interface, such as the Track Info panel that reveals various settings for the selected track, or the Workspaces that rearrange the interface for different tasks. However, simple functions such as switching on the metronome or viewing a virtual instrument's controls took us a while to figure out. Selecting which virtual instrument responded to our MIDI keyboard remained baffling. Many features are hidden behind right-click menus, and poor translations made others impenetrable. Some features and entire recordings mysteriously stopped working. We're not sure if it was our error or the software's, but the result was frustration.

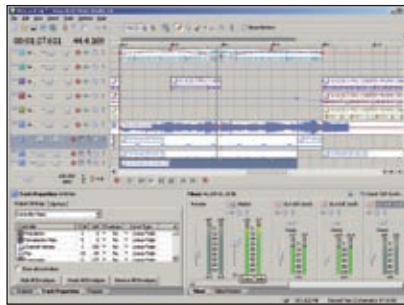
This latest version has Samplitude appended to the product name to indicate similarities with Magix's professional recording application of the same name. They share the same underlying audio engine, but we found it performed badly with our USB audio interface, giving higher latency than our settings should have produced and still suffering glitches. Other new features include improved automation and the same collection of virtual instruments as Magix Music Maker, but any pleasure gained by their excellent sound quality was dispelled by the strain of getting them working.

Samplitude Music Studio has built up a wealth of powerful features but it seems tired and confused. Magix needs to start again from scratch if it is to compete with the streamlined newcomers to PC audio production.

SUMMARY

- ✓ Plenty of sophisticated features
- ✗ Littered with flaws
- ✗ Intimidating interface

MUSIC-PRODUCTION SOFTWARE Requires Windows 2000/XP/Vista, 700MHz processor, 256MB RAM (512MB recommended), 3GB disk space
DETAILS www.magix.com/uk



▲ Acid Music Studio is an ideal starter package for loop-based and acoustic recording projects

SONY Acid Music Studio 7



£36 inc VAT
From www.amazon.co.uk



Sony's low-cost software excels at loop-based music production and manages to appear incredibly simple without sacrificing editing precision. This latest version includes over 3,000 high-quality samples and 1,000 MIDI phrases ready to incorporate into your own projects.

One feature that makes Acid so quick to use is that each audio or MIDI recording has its own track. This means arrangements can be built up by dragging and dropping samples into the main timeline and 'painting' them into position. This works well for samples, but is less beneficial when recording live instruments, particularly when combining different takes into a single compiled performance.

This latest version adds the option to combine recordings and samples on one track, and also supports crossfades for overlapping audio recordings to help produce seamless compiled takes. The ability to paint samples into place hasn't been lost, though; there's now a drop-down list to set which of the samples the Paint tool uses. Also new in version 7 is recording from multiple simultaneous inputs, broadening its appeal for musicians working with live instruments, rather than just samples.

Acid Music Studio 7 lacks a few features compared to the best software here. Recording is limited to 16-bit, 48kHz. The bundled effects are basic, their settings can't be automated and they can be applied only to individual channels, rather than shared across multiple channels as auxiliary effects. MIDI editing includes improved quantisation and velocity-editing options, but remains cumbersome compared to the excellent audio-editing tools. The lone virtual instrument is bland, but VST support provides scope to improve both the effects and instruments.

Considering this package costs a third of the price of many others here, it's an excellent choice for beginners or those on a tight budget.

SUMMARY

- ✓ Friendly and affordable
- ✓ Extremely powerful
- ✗ Basic effects and virtual instruments

MUSIC-PRODUCTION SOFTWARE Requires Windows XP/Vista, 800MHz processor, 256MB RAM, 200MB disk space
DETAILS www.sonycreativesoftware.com



▲ Sequel looks and feels slick, and it strikes a strong balance of flexibility and accessibility

STEINBERG Sequel



£59 inc VAT
From www.guitarampkeyboard.com

Better known for its professional products, Sequel is Steinberg's first attempt at software designed specifically for home users. It's fully self-contained, with a comprehensive effects section, a capable virtual instrument and over 5,000 samples, but no support for third-party VST effects and instruments. Recording is at 24-bit with up to eight simultaneous inputs, and there's no limit to the number of tracks or virtual instruments used in a project.

Steinberg has managed to present the usual array of features in a remarkably streamlined, uncluttered interface. There's no complicated toolbox to contend with, and the dynamic snap-to-grid function allows audio and MIDI objects to be moved with greater precision the more you zoom in. Even potentially complex tasks such as mix automation are surprisingly easy to achieve, and the tabbed area at the bottom presents various settings in a clear, logical format. A browser groups the supplied samples and virtual instrument presets by instrument, genre and acoustic character, and a rating system lets you filter just your favourite sounds. MIDI editing is simple but effective, and recorded audio (but not the supplied samples) can be quantised and skewed with the Warp Beats feature.

The mixer has a simple, hardwired layout that ambitious users will find frustrating, but it should be fine for most people. The effects' controls are simplistic, too, but they provide plenty of creative scope. We particularly like the compressor, which offers a single Threshold control plus various presets with names such as Snare or Brass to set the other, more complex settings behind the scenes.

Sequel doesn't do anything revolutionary, but its interface is ideally suited to aspiring musicians who want accessible recording software that doesn't compromise on precision and sound quality. Only its lack of VST support prevents it earning five stars. **CS**

SUMMARY

- ✓ Streamlined, powerful interface
- ✓ Comprehensive set of effects
- ✗ No VST plug-in support

MUSIC-PRODUCTION SOFTWARE Requires Windows XP SP2/Vista or Mac OS X 10.4, 1.8GHz processor, 1GB RAM, 6GB disk space, 1,280x800-pixel display
DETAILS www.sequel-music.net